Program Summaries
for the 2006 TWG and TLIP Awarded Grants

Tribal Landowner Incentive Program Grants

The Burns Paiute Tribe - The Burns Paiute Tribe manages two wildlife mitigation projects: Logan Valley Wildlife Mitigation Project and Malheur River Wildlife Mitigation Project. These are two unscreened irrigation ditches and an irrigation diversion dam that impact bull trout (Salvelinus confluentus) and interior redband trout (Oncorhynchus mykiss) recovery and influence habitat conditions for the long term recovery of spring chinook salmon (Oncorhynchus tshawytcha). Logan Valley has one unscreened irrigation ditch on McCoy Creek while the Malheur River site has an impassable diversion dam in addition to an unscreened irrigation ditch. Our plan is to have the Oregon Department of Fish and Wildlife (ODFW) design and construct screens on the irrigation ditch and provide a fish ladder on the diversion dam. The Guidelines for Timing of In-water Work to Protect Fish and Wildlife Resources (ODFW 2000) was reviewed for the construction dates. For Logan Valley the in-water work period is July 1-August 3, Malheur River is November 1 – March 3.

Lummi Indian Nation - Lummi Natural Resources seeks funding for project activities in support of Endangered Species recovery in the Nooksack River basin of bull trout (*Salvelinus confluentus*), chinook salmon (*Oncorhynchus tshawytscha)* and other salmonid species. The proposed project's title is: *Smuggler's Slough Fish Passage Project*.

This project will remediate three sites with fish passage blockages on Smuggler's Slough in the Nooksack River estuary, a habitat area described as significant to the recovery of chinook salmon in the WRIA 1 Salmon Recovery Plan. This project will implement several high priority projects developed in the *Nooksack River Estuary Habitat Assessment* (Lummi Natural Resources, 2005).

The project will design, permit and implement treatments that restore fish passage to salmonid rearing and migratory habitat blocked by impassible culverts and tide gates. The project will also restore natural hydrology in the project area without adversely impacting adjacent landowners. Lummi Nation has funding to purchase 70 acres of the property impacted by these restorations with a grant from the Washington State Salmon Recovery Funding Board (SRFB) and has other relevant acquisition funding proposals pending. The proposed fish passage treatments will restore fish passage and tidal hydrology removing or retrofitting existing tide gates with fish-passable tide gates. Where warranted, beaver dam prevention devices will be attached to flow structures to prevent the blockage of fish passage by dam building activity at outflow locations. Beaver dam prevention devices can provide flood protection benefits while ensuring juvenile fish passage.

This will be a two-year project from final design through one-year monitoring. Lummi Natural Resources will use other resources to conduct an additional five years of monitoring to measure

the success of the project in meeting our biological goals and objectives.

This project will not only provide significant environmental benefits, but it will also help defend treaty protected harvest rights and help build the Lummi Nation's technical capacity to further defend these rights.

Nez Perce Tribe - The Nez Perce Tribe currently owns and/or manages 139,500 acres of fee title and trust property within and adjacent to their reservation in north-central Idaho. These lands provide habitat for three rare endemic plant species of the Palouse Prairie ecosystem (Jessica's Aster, Spalding's Catchfly, and Palouse Goldenweed). New plant populations were documented in 2005 through work funded by a 2004 TLIP grant titled "Rare Plant Surveys on Nez Perce Tribe Fee and Trust Lands in Idaho, Oregon and Washington". The 2004 TLIP project has already resulted in significant contributions to our knowledge of plant distributions. The Palouse Goldenweed sites found in 2005 are the first reports of this species in Oregon. Seven new Aster sites were also found within the reservation boundary in Idaho. The current proposal will continue this important work by evaluating key reproductive strategies of these plants and using the cumulative information from both grants to develop conservation strategies for populations on and immediately adjacent to the reservation.

All three of these rare plant species are imperiled because of rarity or because of other factors demonstrably making them vulnerable to extinction. Documentation of key reproductive strategies and limitations would allow tribal biologist to evaluate threats to species survival and develop comprehensive conservation strategies. Conservation plan development would help perpetuate the species and assist with species recovery so that future listings under the Endangered Species Act are not necessary; a key component of the USFWS Strategic Plan. The Spalding's Catchfly conservation strategy (Hill and Grey 2004:78-81) specifically calls for additional research into basic fecundity issues such as pollinator ecology, recruitment, herbivory and insect predation. Similar research needs exist for Jessica's Aster and Palouse Goldenweed.

The Palouse Prairie plan conservation strategy will be incorporated into the Tribal Integrated Resource Management Planning (IRMP) process that is currently underway. The IRMP process was developed by the Bureau of Indian Affairs to assist Tribes in developing strategic level plans of how to mange natural resources on their reservations. The resultant plan provides a framework for integrating sustainable use of a natural resources with an individual tribe's social and cultural values. The current proposal has received support form local scientist and managers at the University of Idaho Stillinger Herbarium, and the regional Tri-State Weed Management Area group, as evidenced by the letters in Appendix A.

Round Valley Tribe - *The Round Valley Indian Tribes (RVIT) is a Federally recognized Confederation of Six Tribes located in northern California and whose original, historic Reservation Boundaries were delineated by three forks of the Eel River and two smaller tributaries, all of which support salmon and steelhead populations. The number and proximity of salmonid bearing streams to the Reservation, combined with the cultural significance associated with subsistence fishing and the declining trend in salmonid populations within the*

region motivated the Round Valley Indian Tribes, in 1998, to undertake a comprehensive Inventory and Assessment of all Class I anadromous streams within Reservation boundaries. Based on this, and subsequent data collected in 1999, RVIT hired a Fisheries/Wildlife Biologist to protect, preserve and enhance the myriad of issues identified therein, as well as a myriad of other wildlife concerns associated with managing - 30,000+ acres under its stewardship.

The funding of these 3 proposals in an <u>essential</u> component to the completion (Phase VI) of the multi-year, two mile Restoration of Mill Creek, the continuation of "fine tuning" enhancement efforts to maximize the efficiency of hydraulic form and function within the Mill Creek Restoration Project area and to follow through with the development of a comprehensive Management Plan for the numerous resources associated with the Round Valley Indian Reservation.

1) The 2006 Mill Creek Restoration Project, (Phase VI)

Mill Creek was identified in 1998 as one of the few streams in Round Valley that still supports native runs of both Chinook Salmon and steelhead. The primary goal of the Mill Creek restoration project is to develop and connect a single, primary channel system with a function riparian corridor through an area nearly two miles long that is characterized by a myriad of side channels, extensive bank erosion and no riparian corridor that is nearly 700 feet wide in places to a point downstream that is once again naturally characterized by a single, primary channel with a functional riparian corridor contained within a 50 foot wide channel.

This objective has been systematically achieved by a series (Phases) of restorative efforts that combine channel excavation, sinuosity patterning, bank rip rap stabilization, bio-engineering techniques and an aggressive re-vegetation effort along the stream course. Concurrently, side channel modifications are designed to: 1) discourage water flow from entering the side channels during "normal" flow events and, 2) act as "overflow" systems that capture sediments carried in by high water events which a series of brush baffles reduce flow rate and "settle out" suspended materials hence naturally filling in the old side channel routes. Re-vegetation efforts consists of planting multiple species of trees and brush en masse to develop a functional Riparian Corridor.

Phase VI should be the final (depending on funding success) Phase in this multi-year effort to restore Mill Creek. Phase VI will consist of approximately 2, 750 feet of primary channel development work, - 1,500 feet of side channel modifications and closures, the development of 10 Bio-engineered boulder rip-rap corners, 3 Willow Weir Baffles for bank protection and stabilization and planting approximately 2,000 feet of Willow Walls.

2) Mill Creek Restoration Enhancement Module.

This component is specifically designated to adjust, modify or otherwise enhance the restoration work previously completed in Phases I - V of the Mill Creek Restoration Project. Each year, the winter and spring rains make various changes in the streams flow patterns. Most of these are beneficial and expected, according to plan, while other changes may be unexpected and detrimental if left unchecked, others may just need "tweaking" in order to improve or obtain maximum efficiency from a specific site. With almost one and a half miles of stream length that

has been restored or reconstructed over the last five years...there are several locations that can benefit from minor adjustments, or additions of LWD, Boulders, Bio-engineering structures or vegetation in order to improve (or enhance) pool development, spawning grounds, shelter value, bank stability or just plant more trees to re-establish the Riparian Corridor ecosystem structure.

In light of the 2006 New Years Day flood event, there exist several more opportunities for enhancement and repair this year. It should be noted that the Enhancement work implemented with last years TLIP funding held up and performed wonderfully during the flood! Thank You!!!

3) Development of a Fisheries & Wildlife Management Plan

When RVIT hired a Fisheries & Wildlife Biologist in November 1999, the Tribe had no formal, long-range scope of objectives to be addressed, short term and annual objectives were sufficient to warrant a Biologist. In 2001 the Tribe began efforts to resurrect development of its own Fish & Wildlife Ordinance Code, it is currently pending final Council Approval. The Tribe is developing a Deer Herd Management Program and is considering a Fish Hatchery to help restore fish numbers in the upper Eel River system. As the Fisheries and Wildlife Program continues to develop and expand its role, the need for a long-term management plan is becoming increasingly self-evident.

TLIP funding granted in 2005 got the process started and a foundation established. However, developing the Management Plan and guiding it through the maze of Community meetings, consultations with various State and Federal Agencies, writing, and editing the actual document is a relatively complex and time consuming process. The importance of developing a Management Plan for Tribal Resources is paramount, hence the Tribe will continue to shoulder the largest part of the expenses involved. The Round Valley Indian Tribes are one of the few Tribes in California that does not have a Casino, and as such we do not have the financial resources available to fund such programs as readily as others may. As such, outside funding assistance becomes increasingly important to see these projects to completion. This project is simply turning out to be more time consuming than first anticipated!

Stillaguamish Tribe - The Tribe proposes a restoration project on river mile 22 of the North Fork Stillaguamish River. The objectives of this project are to 1) introduce engineered logjams in the river adjacent to and upstream of 65 acres of protected riparian forest, and 2) update and expand the draft Habitat Conservation Plan to include all Tribal Wilderness areas and strategic goals for watershed stewardship. The purpose of the logjams is two-fold; to introduce additional large wood structures to scour pools and to route year round flow into side-channel habitat adjoining the North Fork. The existing channels carry water during high flows buy dry up during summer and fall months. This project would create additional rearing and spawning habitat for Chinook and other salmon species.
Initial project steps will involve acquiring the necessary permits to perform in-stream placement of engineered logjams (ELJ), design and planning for placement of ELJs, and expanding the

Tribal Habitat Conservation Plan. This phase should be complete by spring 2007. Logjams will be constructed and side channels opened during summer low flow of 2007, before active Chinook spawning occurs. Invasive plants will be addressed during summer of 2006 and native vegetation will be planted in the autumn following construction. Establishment of a native plant community in close proximity to the jams will increase the longevity of the structures and the function they provide.

The Tribe will monitor the engineered logjams for biological and physical changes in the surrounding habitat. Once in place the jams themselves should require little or no effort to maintain over time. Several existing previously installed logjams have gained wood since construction and continue to function effectively. The Tribe will also monitor the changes that occur within side-channels of the 65 acres and continue to be long-term stewards of the watershed.

Tribal Wildlife Grants

The Confederated Tribes of Grand Ronde - The Confederated Tribes of Grand Ronde Community of Oregon (CTGR) proposes to initiate a program to assess the population of Columbian black-tailed deer (Odocoileus hemionus columbianus) on its Reservation, establish baseline information, and build the capacity of the CTGR to monitor deer population trends over time. Black-tailed deer populations appear to have declined throughout their range in Oregon as have hunter success and harvests. The CTGR has experienced similar declines within the CTGR hunting area. The black-tailed deer is a culturally significant species and to protect it the CTGR believes that direct population information is needed to manage it responsibly for current and future generations. Specific objectives of the project are to estimate the black-tailed deer population in a study area on the CTGR Reservation, determine fawn and doe survival, determine age and sex structure of the population, and monitor disease.

Primary methods to achieve the objectives will involve fitting 60 black-tailed does and 30 fawns with radio transmitter collars. Fawn survival will be tracked for up to one year and doe survival up to two years. Collared does will be used to estimate the total number of does in the study area using mark-recapture techniques. Age and sex structure of the deer population will be determined by spotlight surveys. All of the population parameters will be used in several population modeling programs to estimate the total population of does, bucks, and fawns within the study area. Diseases that may be a threat to black-tailed deer will be monitored by collecting samples from hunter-harvested deer and submitting them for testing. The benefits expected to result from the project include direct population information on black-tailed deer that can be used to make informed decisions and recommendations regarding management, baseline information to which future comparisons can be made, current status of diseases, a method to assess black-tailed deer populations, and greater capacity of the CTGR to monitor deer population trends.

The Confederated Tribes of Grand Ronde - The Confederated Tribes of Grand Ronde Community of Oregon (CTGR) proposes to study the upstream migration habits of Pacific lamprey (*Lampetra tridentata*) in the Willamette River Basin, Oregon. Pacific lamprey populations have declined throughout their range in the Pacific Northwest. Dam counts and

harvest rates have fallen dramatically. Within the Willamette Basin, lamprey appear to have faired better than in other river basins of the Columbia Basin, though they have declined and face considerable threats. The CTGR as well as other partners in the region believe that understanding Pacific lamprey status, distribution, and life history are required to ensure the persistence of healthy Pacific lamprey population into the future. Under this proposal, the CTGR will radio tag Pacific lamprey in the Willamette River and track their movements as they migrate upstream to spawning grounds. The benefits expected to result from the project include understanding the timing of Pacific lamprey migration, identify important over-wintering locations, and determining the relative use of primary tributaries for spawning, allowing the CTGR and other fish and wildlife managers to effectively manage and conserve Pacific lamprey and their habitats.

Lummi Indian Nation - Lummi Natural Resources is seeking funding for project activities that support tribal goals of improving endangered species populations, providing high qualify critical habitat, and building tribal technical resources in the Nooksack River basin. The Upper South Fork Nooksack Instream Project has been identified as an early action project for the Nooksack River that seeks to address several of the limiting habitat factors identified in the WRIA 1 Salmon Recovery Plan. These limiting factors include elevated fine sediment, elevated stream temperature and loss of habitat diversity. Recommendations for addressing critical needs for watershed restoration in the Nooksack have been prioritized in the WRIA 1 Salmon Habitat Restoration Strategy (WRIA 1 Lead Entity 2005), which highlights the project area as one of the most important reaches for habitat restoration projects. Match funding is already secured from the Washington State Centennial Clean Water Fund and Seattle City Light.

The proposed project will removed a failing bridge and associated fill at River Mile 29.5 and provide for the restoration of spawning and holding habitat in a historically significant bull trout (*Salvelinus confluentus*) and chinook salmon (*Oncorhynchus tshawytscha)* spawning reach. The bridge alignment has exacerbated adjacent landslides by forcing the channel against an unstable slope. It will be necessary to remove the bridge and associated fill to realign the channel away from the landslides and allow the channel enough room to begin migrating again. This will also facilitate habitat formation and increase habitat diversity in the reach. The project entails using wood and rock structure to toughen the current channel and encourage channel migration away from several large landslides. As the channel moves away from the landslides, the run-out area will reach an angel of repose and begin to stabilize. The goal ;is to mimic the natural process of large wood recruitment to the channel from landslides. Wood brought down by the slide would have armored the toe of the slide and protected it from channel erosion. The project will provide immediate habitat benefits and, over the longer-term, improve the condition of the aforementioned Endangered Species Act-listed species.

Puyallup Tribe - With the support of the Medicine Creek Treaty Tribes, the Puyallup Tribe of Indians seek funding to continue necessary elk management activities and to conduct specific habitat improvement project in the critical winter habitat range of the South Rainier Elk Herd. The South Rainier Elk herd is the primary stock of elk within their Treaty protected hunting area that is harvested by the Puyallup, Nisqually, and Squaxin Island Tribes. The Puyallup Tribe has

hunted elk for subsistence and ceremonial purposes since time immemorial. For at least the last 5 years, there has been a steady decline in the overall South Rainier elk herd populations. The ratio of bulls to cows has been consistently lower than that to sustain a healthy diverse populations. Cow survival rates for 2004 were unusually low. It is necessary to determine the precise cause of death. The high cow mortality rates, may be the primary factor limiting herd size. Calf:cow ratios are somewhat stable but must continue to be monitored as well. This steady decline and the poor herd composition ratios are of great concern to the Medicine Creek Treaty Tribes. Medicine Creek Treaty Tribes harvest - 5% of the total South Rainier Elk harvested per year. The tribes are still specifically concerned about potential over-harvest of elk by non-tribal hunters. The Tribes must continue to conduct management activities (collect data, continue model development for predicting herd size) to provide sufficient data to substantiate recommendations made regarding non-tribal harvest. There has also been a considerable reduction in the funds allocated by other government entities to gather data on the South Rainier elk herd. Therefore, the Medicine Creek Treaty Tribes feel that it is imperative that funds are sought to continue to perform the essential management activities described in this proposal, and to further reestablish, enhance, and protect critical elk winter habitat in an area where habitat is rapidly being fragmented and developed.

This project proposes two main elements that are the foundations for maintaining sustainable elk populations for years to come. The first element is elk management activities that include conducting spring and fall elk surveys for annual herd composition and herd size estimates. The Tribe will be utilizing the sightabiltiy model that was previously de3velped by the Puyallup Tribe. The model is being used as a reliable management tool for predicting herd composition and size. Also contributing to the continued research efforts, the Puyallup tribe has plans to maintain 30 elk in radio-collars and to continue to use the radio-collared elk to gather valuable information on annual cow elk mortality/survival to aid in stabilizing and increasing the elk herd size.

The second major element of this proposal is elk habitat enhancement. In addition to land acquisition in the herd's critical winter habitat range that is already underway by the Tribe, we proposed to work cooperatively with the U.S. Forest Service by acquiring much needed funds to conduct pre-commercial thinning on up to 300 acres of commercial timber lands in the Gifford Pinchot National Forest within the South Rainier elk herd's winter range. Thinning projects such as the one proposed here have been extremely successful in improving forage quality and quantity for elk and many other wildlife species. Preliminary site selection has been made, and a map of the potential sites with associated data has been provided with this proposal, as well as a discussion of the next steps to be taken.

The South Rainier Elk population has been steadily declining over the last five years. Continued estimates of population size and composition are clearly needed to protect sustainable populations of elk. The work described in the proposal is in line with State and Tribal priority objectives for future management of the South Rainier Elk Herd. The objectives described in this proposal will benefit elk by providing a more accurate picture of herd size and composition, steer harvest management decision to provide a healthier more robust population, and provide critical winter habitat enhancement. In turn Medicine Creek Treaty Tribes will benefit from greater abundance of elk for subsistence and ceremonial purposes in years to come. This project

benefits tribal and non-tribal members in providing development of better management tools and habitat protection in perpetuity. The total cost of the project is expected to be $229,046.

Susanville Indian Rancheria - The Susanville Indian Rancheria (SIR) has partnered with the Lassen National Forest and the Confederated Tribes of the Umatilla Indian Reservation to develop a U.S. Fish and Wildlife Service Tribal Wildlife Program (TWP) proposal to examine mussel populations in rivers and streams within SIR's ancestral homelands in the northern Sierra Nevada/Cascade region. Water bodies to be surveyed include: The North Fork Feather River, Susan River, Deer Creek, Butte Creek, and Mill Creek. We propose to conduct qualitative and quantitative surveys over a two-year period. The measurable objective of this survey is to produce a map of relative mussel densities at numerous locations within each of the target streams. Staff from the Freshwater Research and Restoration Project with the Confederated Tribes of the Umatilla Indian Reservation will provide training in both qualitative and quantitative survey methods, field data collection, and freshwater mussel inventory techniques to staff members of the Susanville Indian Rancheria.

In addition to examining the current distribution of mussel populations, the Lassen National Forest Heritage Program will train SIR staff to examine historical archaeological data in order to establish baseline data on the historical presence, distribution and relative abundance of freshwater mussel species within the vicinity of the project area.

Through this work we hope to achieve not only a much-improved understanding of the current and historic state of California mussel populations on ancestral homelands of the Susanville Indian Reservation, but to guide conservation planning for these unique and often ignored organisms. In addition, cooperative partnerships between two federally recognized Indian Tribes and the Forest Service will be further developed.

Yakama Nation - This Program proposes to increase the Yakama Nation's capacity to protect a diverse array of wildlife species across their 1 A-million acre Reservation through development of a long-term Comprehensive Forest and Range Wildlife Management Plan. This proposal continues the Yakama Reservation focal species survey and habitat mapping work begun in 2004 and continued in 2005 under Tribal Wildlife Grant FY03 and FY04 finding, to provide basic information needed for this plan. However this proposal responds to the knowledge and experiences accumulated through the first 2 years of effort by adding support for a planner to write and implement the Plan, featuring an integrated approach to assessing meadow habitats, and incorporating critical initial restoration work. The proposal moves us rapidly toward completion of a plan that will provide direction and guidelines for management of wildlife species and their habitats on the Reservation. Management could thus move beyond merely attempting to mitigate impacts of timber harvests, and toward enhancement and restoration.

Using the species distribution, habitat characterization and reintroduction work done in 2004 and 2005 under Tribal Wildlife Grants as a starting point, these projects will refine mapping of extent and condition of suitable habitat (for wetland species, old growth dependant species), monitor the bighorn sheep reintroduced in 2005, and monitor sensitive species (for bats, amphibians,

carnivores, mardon skippers, and sandhill cranes). This proposal places increased emphasis on establishing streamlined sampling methods for monitoring sensitive species, assessing condition of meadow habitats, and identifying restoration needs and opportunities. Pilot restoration activities are planned for streams (through reintroduction of beavers), declining aspen stands (by removing conifers and creating barriers to grazers), and potential habitat for pronghorn and other shrub-steppe species (by repairing fences to allow recovery from over-grazing). Degradation of Old Growth Management Areas and spotted owl nesting areas by woodcutters will be addressed by posting signs and distributing educational materials to discourage snag falling in these areas. Also newly added for this proposal is partial-year funding for a Planner dedicated to drafting the Yakama Nation's Wildlife Management Plan and seeking finding for implementation.